

A1 In another embodiment, the present invention provides an increase in phosphorus availability of from 28% for yellow dent corn to greater than about 70%, preferably less than about 90%, alternatively about 80% to about 84-85%. Availability being the amount of utilizable phosphorus compared to total phosphorous from feed. The hybrid grain of the present invention is preferably a cross between useful inbreds and an inbred line ExSeed line U095 - lpa1-E (alternatively referred to as U095-E or U095py; deposited as strain designation EX1965py on July 7, 1998 with American Type Culture Collection, 10801 University Blvd., Manassas, VA 20110-2209 USA, under conditions of the Budapest Treaty, Accession No. 203034. Source U095-py 1656-W97 - Florida - 100) The "E" or "py" designation used herein indicates the introduction of a lpa1 mutation by the present inventors. A number of other crosses and inbreds can be employed. For example, the following female inbreds BD68py, TR306py, WD22py and TR329py were crossed with male inbreds U095py, UU01py, UE95py, TR335py and TR386py to make high-yielding hybrid combinations. Crosses with U095py are particularly preferred and the inbred U095py and hybrids made therefrom are specific embodiments of the present invention. The hybrid grain of the present invention characterized by having ~6% oil and 12% protein (or 3% more oil and 3% more protein than yellow dent corn) and at least about 33% reduction in phytic acid content.

IN THE ABSTRACT

Insert the attached Abstract after the claims pages.

IN THE CLAIMS

Amend the claims as follows.

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